10/5/4348

10/5/4348

PATENT APPLICATION

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q93696

Masahiro FURUYA

Appln. No.: National Stage of PCT/JP2004/018305

Confirmation No.: Unknown Group Art Unit: Unknown

Filed: April 3, 2006 Examiner: Unknown

For: METHOD FOR PRODUCING SUBSTRATE HAVING CARBON-DOPED TITANIUM

**OXIDE LAYER** 

## INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

## MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

filing a request for continued examination (RCE) under §1.114, and therefore, no Statement

under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for

foreign language documents, Applicant encloses herewith a copy of a Communication from a

foreign patent office in a counterpart application citing such documents (International Search

Report for PCT/JP2004/018305 dated March 22, 2005), together with an English-language

version (if not already included) of at least that portion of the Communication indicating the

degree of relevance found by the foreign patent office.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for

foreign language documents, Applicant submits the following explanations: English language

abstracts, submitted here with, constitute concise statements of relevance for JP 2001-205103, JP

2001-205094, and JP 2002-95976. Also, WO 01/10553 corresponds to U.S. 6, 794,065 and WO

98/23374 corresponds to U.S. 6,306, 343.

The submission of the listed documents is not intended as an admission that any such

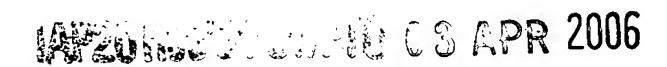
document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

2

10/574348



INFORMATION DISCLOSURE STATEMENT Appln. No.: National Stage of PCT/JP2004/018305 Attorney Docket No. Q93696

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Abraham J. Rosner

Registration No. 33,276

SUGHRUE MION, PLLC Telephone: (202) 293-7060

Facsimile: (202) 293-7860

washington office 23373
customer number

Date: April 3, 2006

MODIFIED PTO/SB/08 A & B (06-03)

Substitute for Form 1449 A & B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

Сотр	olete if Known
Application Number	National Stage of 5 4 5 PCT/JP2004/018305
Confirmation Number	Unknown
Filing Date	April 3, 2006
First Named Inventor	Masahiro FURUYA
Art Unit	Unknown
Examiner Name	
Attorney Docket Number	Q93696

			U.S.	PATENT DOCU	JMENTS	
Ī		Document Number				
Examiner Cite Initials* No.1		Number Kind Code <sup>2</sup> (if known)		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	
		US 6,794,065	B1	09/21/2004	TAKESHI MORIKAWA, ET AL	
		US 6,306,343	B1	10/23/2001	KAZUO SUGIYAMA	
		US				

FOREIGN PATENT DOCUMENTS							
	Cite	Foreign Patent Document			Publication Date	Name of Patentee or	
	No.1	Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation <sup>6</sup>
		JP	2004-167370	Α	06/17/2004	JAPAN ATOM ENERYG RES. INST.	Abstract
	-	JP	2004-283790	Α	10/14/2004	TOSHIBA CERAMICS CO. LTD.	Abstract
		JP	2005-47787	Α	02/24/2005	TOSHIBA CERAMICS CO. LTD.	Abstract
		JP	2002-12962	Α	01/15/2002	NIPPON STEEL CORP.	Abstract
		wo	98/23374	A1	06/04/1998	ECODEVICE LAB CO. LTD. (JP) and SUGIYAMA KAZUO (JP)	Abstract
		JP	9-87857	Α	03/31/1997	RES. DEV. CORP. OF JAPAN	Abstract
		JP	2003-73799	Α	03/12/2003	FUJI OOZX INC.	Abstract
		JP	2001-49421	Α	02/20/2001	FUJI OOZX INC.	Abstract
		JP	11-43770	Α	02/16/1999	TANAKA:KK	Abstract
		JP	2001-205103	A	07/31/2001	TOYOTA CENTRAL RES. & DEV. LAB INC.	Abstract
3		JP	2001-205094	A	07/31/2001	TOYOTA CENTRAL RES. & DEV. LAB INC.	Abstract
		JP	2002-95976	Α .	04/02/2002	TOYOTA CENTRAL RES. & DEV. LAB INC.	Abstract
		wo	01/10553	A1	02/15/2001	TOYODA CHUO KENKYUSHO KK (JP); MORIKAWA TAKESHI (JP); ASAHI RYOJI (JP); OHWAKI TAKESHI (JP) and TAGA YASUNORI (JP)	Abstract

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.				
		AKIRA FUJISHIMA, ET AL, "HYDROGEN PRODUCTION UNDER SUNLIGHT WITH AN ELECTROCHEMICAL PHOTOCELL", J. ELECTROCHEM. SOC., Vol. 122, No. 11, November 1975, pages 1487-1489				
		R. ASAHI, ET AL, "VISIBLE-LIGHT PHOTOCATALYSIS IN NITROGEN-DOPED TITANIUM OXIDES", SCIENCE, Vol. 293, July 13, 2001, pages 269-271				
		SHADED U. M. KHAN, ET AL, "EFFICIENT PHOTOCHEMICAL WATER SPLITTING BY A CHEMICALLY MODIFIED n-TiO <sub>2</sub> ", SCIENCE, Vol. 297, September 27, 2002, pages 2243-2245				

Examiner Signature	Date Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.